



GLOBAL CLIMATE CHANGE

MAY 2006



USAID has an extensive environmental program in Brazil that encompasses many imperative and current issues. Support to the Government of Brazil, as well as other interested parties, has helped Brazil address climate change through various energy and land use activities. In addition to capacity-building measures in Brazil, USAID has facilitated beneficial partnerships that help in achieving the goal of sustainable development in this extremely biodiverse country.

Background. Brazil, located in east-central South America, occupies nearly 50% of the South American continent. Slightly smaller than the United States, this Portuguese-speaking country has a total area of 3,290,000 square miles and a population of just over 188 inhabitants.¹ Brazil has traditionally been a leader in the inter-American community and as the largest economy in South America, has played an important role in collective security efforts, hemispheric economic cooperation, and international economic and trade policy discussions. Over half of Brazil is covered with forests, which include the Amazon Rain Forest – the largest in the world. The country has eight river systems that carry approximately 20% of the world's fresh water² and is home to the continent's largest wetland in the Pantanal region.

The USAID program in Brazil addresses regional and global issues of mutual concern, as well as its serious national-level socio-economic problems, and includes:

- Protection of Brazil's environment and unique biodiversity;
- Reduction of greenhouse gas emissions through the promotion of alternative energy and energy efficiency;
- Increased training and employment opportunities for disadvantaged Brazilian youth and the elimination of trafficking in youth;
- HIV/AIDS prevention and decreased tuberculosis and other communicable diseases; and
- Promotion of free trade, development of small and medium enterprises, as well as support of the Government of Brazil's Zero Hunger Program.

USAID support to the Government of Brazil, as well as Brazilian nongovernmental organizations (NGOs) – such as the Brazilian Network of Civil Organizations for Renewable Energy and the Brazilian Forest Stewardship Council, has helped Brazil address climate change through various energy and land use activities.

Sector Specific Climate Change Activities. USAID/Brazil's environment and energy programs address two important environmental priorities – *global climate change and conserving biological diversity*. USAID activities promote sound land use in the Amazon, the Atlantic Coastal Rain Forest, the Cerrado and, more recently, the Pantanal. Due to serious risk of accidental fires in these ecosystems, USAID has directed special attention to fire-preparedness and prevention. USAID efforts in this area are also increasingly focused on

¹ Central Intelligence Agency Factbook, July 2006

² FY 2006 Congressional Budget Justification - Brazil

USAID's partners in climate change activities in Brazil include*:

- Institute of Environment Research for Amazônia (IPAM)
- Amazon Institute for Man and the Environment (IMAZON)
- Brazilian Enterprise for Agricultural and Livestock Research (EMBRAPA)
- Brazilian Environment Agency (IBAMA)
- Brazilian Forest Stewardship Council (FSC)
- Brazilian Ministry of the Environment (MMA)
- Brazilian Ministry of Mines and Energy (MME)
- Brazilian Network of Civil Organizations for Renewable Energy (RENOVE)
- Instituto Floresta Tropical (IFT)
- The Nature Conservancy (TNC)
- Woods Hole Research Center (WHRC)
- World Bank/Global Environment Facility (GEF)
- World Wildlife Fund (WWF)
- United Nations Development Programme (UNDP)

* Because partners change as new activities arise, this list of partners is not comprehensive.

local community-based alternatives to the use of slash and burn techniques in traditional agriculture to reduce carbon emitting practices. On the energy side, USAID programs seek to support Brazil's ability to mitigate climate change impacts by promoting clean energy technologies and focusing on policy, regulation, and financing mechanisms critical to ensuring sustainable energy use.

Land Use and Protected Area Management. USAID/Brazil actions support protection and sustainable use of the natural resources base in key Brazilian ecosystems, including the Amazon, Atlantic forest, and Cerrado/Pantanal regions.

During 2004, in collaboration with the Woods Hole Research Center (WHRC), the Institute of Environmental Research for Amazônia (IPAM), the Amazon Institute for Man and the Environment, Instituto Floresta Tropical, the Brazilian Ministry of the Environment, and other agencies, USAID supported forestry policy development, technical assistance for forestry certification, forest surveys, development of non-timber forest products, and the creation of an Amazon regional forest management training center. Also during that year, research continued on carbon storage in 13 forest fragments in Atlantic Forest areas which served as the basis for proposed landscape restoration and "social carbon" (community-focused initiatives that include carbon sequestration, maintenance of carbon stocks in forests, reduction of slash and burn practices, and a system of remuneration for environmental services rendered) submitted to BioCarbon Fund/IBRD, EC, GEF and the state oil company, Petrobras. A proposal for the construction of a 700 hectares carbon corridor, in partnership with a large landowner, has also been approved for funding by Petrobras.

Under the Environment Forest Management Program, USAID provides targeted technical assistance, institutional capacity building and training to improve forest management practices, including sustained timber yields; increase community forest certification; promote partnerships between commercial loggers and colonists ('family forests'); and implement environmental services compensation for smallholder agroforestry settlements. One example is the Family Forest's Timber Model, a promising industry-smallholder partnership developed by a Santarém logging company, replicated by USAID partners along major highway corridors in the Amazon.

In addition, USAID-supported training and capacity building is helping reduce the gap between the demand for qualified technicians, foresters, government auditors and decision-makers and the supply of forest management qualified professionals in Amazonia. In 2005, USAID partners trained 2,998 technicians in sound forest management techniques.

Early estimates of 2004-2005 figures indicate that deforestation dropped 30% from 2003's near-record high of 27,200 square kilometers. In 2005, Brazil's House of Representatives passed legislation defining rules for forest concessions, which will provide a more orderly alternative to current logging operations that frequently occur illicitly on public lands. USAID/Brazil has continued to show enduring progress toward helping to halt deforestation and environmental degradation of the Amazonian rainforest, both major causes of Brazil's contribution to carbon dioxide (CO₂) emissions.

USAID/Brazil's Environment Biodiversity Conservation Program supports regional landscape-level activities comprising protected area, managed forests, natural resource plans and indigenous lands, as well as landscape restoration and carbon sequestration activities under social carbon community projects. Under this project, USAID partners have implemented improved biodiversity conservation practices in 12,707,300 hectares of the Amazon and have trained 1,920 persons in conservation management.

Energy Sector. USAID plays a major role in the creation of Energy Service Companies (ESCOs) in Brazil supporting capacity-building activities and adaptation and dissemination of effective performance contracts. USAID/Brazil's energy program contributions in the policy arena resulted in new legislation restructuring the energy sector (Law 10438). USAID/Brazil's energy program contributions in the policy arena resulted in new legislation restructuring the energy sector (Law 10438) as well as the PROINFA Program to increase the participation of alternative energy sources in the Brazilian energy matrix.

In 2004, USAID co-sponsored Brazil's largest renewable energy trade fair ever – "Power Future 2004" – which brought together over 2,000 participants and 40 local and international exhibitors, including five U.S. corporations. USAID estimates that the event resulted in direct sales, service contracts, and business partnership proposals valued as high as \$30 million.

USAID supports a number of energy programs in Brazil which help rural entrepreneurs finance renewable energy projects resulting in reduced carbon emissions and cleaner and more efficient renewable energy options. Recently, USAID/Brazil focused work on small hydropower plants which offset the use of fossil fuels in the Amazon, as well as methane recovery in a landfill in Fortaleza, resulting in the avoidance of an estimated 4,300,000 tons of CO₂.

Through the Global Energy Village Partnership (GVEP), a 10-year sustainable development partnership, USAID/Brazil supports the provision of energy to the underserved as a means to accelerate rural development and alleviate poverty. In 2005 and 2006, USAID/Brazil pilot tested the GVEP Action Plan in

six communities that used their newly acquired energy to develop productive income generating activities, benefiting over 6,000 people.

The Brazil Energy Capacity Building Program (BECBP) promotes sustainable and clean energy generation and use in Brazil through training and capacity building activities, benefiting public and private sector organizations. In 2005, USAID partners trained nearly 1,900 representatives of public and private sector organizations and indirectly influenced an estimated 300 energy efficiency projects throughout Brazil. These participants went on to develop 62 energy efficiency projects. Under the Energia Productiva Project, USAID supported a consortium of 8 NGO partners who promote the use of sustainable and clean energy technologies in North and Northeast Brazil. Training initiatives and information dissemination reached more than 60,000 beneficiaries, while direct income- generating and improved quality of life interventions reached over 8,000 people.

Capacity Building. With its many partners, USAID supports training opportunities and implements a variety of capacity-building activities that help Brazil meet the goals of the United Nations Framework Convention on Climate Change (UNFCCC) and raise awareness of the effects of climate change and mitigation options.

In 2004, USAID continued to provide assistance to the Brazilian Renewable Energy Non-Governmental Organization Network (RENOVE) to increase its participation in the energy policy arena. RENOVE members participated in a number of climate change events in 2004 including the 10th Conference of the Parties under the UNFCCC (COP-10) held in Buenos Aires, Argentina.

The Institute of Environmental Research in the Amazon – IPAM, a USAID partner organization, has consolidated its leadership role in raising awareness and promoting policy discussions concerning climate change with federal government officials.

For more information on Brazil, visit USAID's
Web site at:

<http://www.usaid.gov/>